

2128



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OIPE

## RAW SEQUENCE LISTING

DATE: 02/27/2002

PATENT APPLICATION: US/10/068,569

TIME: 10:16:19

Input Set : A:\475.app

Output Set: N:\CRF3\02272002\J068569.raw

ENTERED

4 <110> APPLICANT: Srinivasula, Srinivasa M.  
 5 Fernandes-Alnemri, Teresa  
 6 Alnemri, Emad S.  
 10 <120> TITLE OF INVENTION: A CONSERVED XIAP-INTERACTION MOTIF IN  
 11 CASPASE-9 AND SMAC/DIABLO FOR MEDIATING APOPTOSIS  
 14 <130> FILE REFERENCE: 480140.475  
 C--> 16 <140> CURRENT APPLICATION NUMBER: US/10/068,569  
 17 <141> CURRENT FILING DATE: 2002-02-06  
 19 <160> NUMBER OF SEQ ID NOS: 28  
 21 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 23 <210> SEQ ID NO: 1  
 24 <211> LENGTH: 416  
 25 <212> TYPE: PRT  
 26 <213> ORGANISM: Homo sapiens  
 28 <400> SEQUENCE: 1  
 29 Met Asp Glu Ala Asp Arg Arg Leu Leu Arg Arg Cys Arg Leu Arg Leu  
 30 1 5 10 15  
 31 Val Glu Glu Leu Gln Val Asp Gln Leu Trp Asp Ala Leu Leu Ser Arg  
 32 20 25 30  
 33 Glu Leu Phe Arg Pro His Met Ile Glu Asp Ile Gln Arg Ala Gly Ser  
 34 35 40 45  
 35 Gly Ser Arg Arg Asp Gln Ala Arg Gln Leu Ile Ile Asp Leu Glu Thr  
 36 50 55 60  
 37 Arg Gly Ser Gln Ala Leu Pro Leu Phe Ile Ser Cys Leu Glu Asp Thr  
 38 65 70 75 80  
 39 Gly Gln Asp Met Leu Ala Ser Phe Leu Arg Thr Asn Arg Gln Ala Ala  
 40 85 90 95  
 41 Lys Leu Ser Lys Pro Thr Leu Glu Asn Leu Thr Pro Val Val Leu Arg  
 42 100 105 110  
 43 Pro Glu Ile Arg Lys Pro Glu Val Leu Arg Pro Glu Thr Pro Arg Pro  
 44 115 120 125  
 45 Val Asp Ile Gly Ser Gly Gly Phe Gly Asp Val Gly Ala Leu Glu Ser  
 46 130 135 140  
 47 Leu Arg Gly Asn Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys  
 48 145 150 155 160  
 49 Gly His Cys Leu Ile Ile Asn Asn Val Asn Phe Cys Arg Glu Ser Gly  
 50 165 170 175  
 51 Leu Arg Thr Arg Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg  
 52 180 185 190  
 53 Arg Phe Ser Ser Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr  
 54 195 200 205  
 55 Ala Lys Lys Met Val Leu Ala Leu Leu Glu Leu Ala Gln Gln Asp His  
 56 210 215 220

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57 Gly Ala Leu Asp Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln
58 225                230                235                240
59 Ala Ser His Leu Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys
60                245                250                255
61 Pro Val Ser Val Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys
62                260                265                270
63 Pro Ser Leu Gly Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly
64                275                280                285
65 Gly Glu Gln Lys Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu
66                290                295                300
67 Asp Glu Ser Pro Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln
68 305                310                315                320
69 Glu Gly Leu Arg Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro
70                325                330                335
71 Thr Pro Ser Asp Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val
72                340                345                350
73 Ser Trp Arg Asp Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp
74                355                360                365
75 Asp Ile Phe Glu Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu
76                370                375                380
77 Leu Arg Val Ala Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met
78 385                390                395                400
79 Pro Gly Cys Phe Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser
80                405                410                415

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83 <210> SEQ ID NO: 2

84 <211> LENGTH: 15

85 <212> TYPE: PRT

86 <213> ORGANISM: Drosophila sp.

88 <400> SEQUENCE: 2

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89 Ala Val Ala Phe Tyr Ile Pro Asp Gln Ala Thr Leu Leu Arg Glu
90 1                5                10                15

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93 <210> SEQ ID NO: 3

94 <211> LENGTH: 15

95 <212> TYPE: PRT

96 <213> ORGANISM: Drosophila sp.

98 <400> SEQUENCE: 3

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99 Ala Ile Ala Tyr Phe Ile Pro Asp Gln Ala Gln Leu Leu Ala Arg
100 1                5                10                15

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103 <210> SEQ ID NO: 4

104 <211> LENGTH: 15

105 <212> TYPE: PRT

106 <213> ORGANISM: Drosophila sp.

108 <400> SEQUENCE: 4

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110 1                5                10                15

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113 <210> SEQ ID NO: 5

114 <211> LENGTH: 15

115 <212> TYPE: PRT

116 <213> ORGANISM: Mus musculus

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Input Set : A:\475.app

Output Set: N:\CRF3\02272002\J068569.raw

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118 <400> SEQUENCE: 5
119 Ala Val Pro Tyr Gln Glu Gly Pro Arg Pro Leu Asp Gln Leu Asp
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124 <211> LENGTH: 15
125 <212> TYPE: PRT
126 <213> ORGANISM: Homo sapiens
128 <400> SEQUENCE: 6
129 Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe Asp Gln Leu Asp
130 1 5 10 15
133 <210> SEQ ID NO: 7
134 <211> LENGTH: 15
135 <212> TYPE: PRT
136 <213> ORGANISM: Xenopus sp.
138 <400> SEQUENCE: 7
139 Ala Thr Pro Val Phe Ser Gly Glu Gly Asp Arg Asp Glu Val Asp
140 1 5 10 15
143 <210> SEQ ID NO: 8
144 <211> LENGTH: 15
145 <212> TYPE: PRT
146 <213> ORGANISM: Homo sapiens
148 <400> SEQUENCE: 8
149 Ala Val Pro Ile Ala Gln Lys Ser Glu Pro His Ser Leu Ser Asn
150 1 5 10 15
153 <210> SEQ ID NO: 9
154 <211> LENGTH: 5
155 <212> TYPE: PRT
156 <213> ORGANISM: Homo sapeins
158 <400> SEQUENCE: 9
159 Ala Val Pro Ser Pro
160 1 5
163 <210> SEQ ID NO: 10
164 <211> LENGTH: 5
165 <212> TYPE: PRT
166 <213> ORGANISM: Homo sapiens
168 <400> SEQUENCE: 10
169 Ala Ile Pro Phe Phe
170 1 5
173 <210> SEQ ID NO: 11
174 <211> LENGTH: 15
175 <212> TYPE: PRT
176 <213> ORGANISM: Homo sapiens
178 <400> SEQUENCE: 11
179 Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe Asp Gln Leu Asp
180 1 5 10 15
183 <210> SEQ ID NO: 12
184 <211> LENGTH: 7
185 <212> TYPE: PRT
186 <213> ORGANISM: Homo sapiens

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/068,569

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Input Set : A:\475.app

Output Set: N:\CRF3\02272002\J068569.raw

188 <400> SEQUENCE: 12  
 189 Ala Val Pro Ile Ala Gln Lys  
 190 1 5  
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 194 <211> LENGTH: 4  
 195 <212> TYPE: PRT  
 196 <213> ORGANISM: Artificial Sequence  
 198 <220> FEATURE:  
 199 <223> OTHER INFORMATION: Consensus IAP-binding motif  
 201 <221> NAME/KEY: VARIANT  
 202 <222> LOCATION: (2)...(2)  
 203 <223> OTHER INFORMATION: Xaa = Val, Thr or Ile  
 205 <221> NAME/KEY: VARIANT  
 206 <222> LOCATION: (3)...(3)  
 207 <223> OTHER INFORMATION: Xaa = Pro or Ala  
 209 <221> NAME/KEY: VARIANT  
 210 <222> LOCATION: (4)...(4)  
 211 <223> OTHER INFORMATION: Xaa = Gly, Ala, Val, Leu, Ile, Pro, Ser, Thr, Cys,  
 212 Met, Asn or Gln  
 214 <400> SEQUENCE: 13  
 215 Ala Xaa Xaa Xaa  
 216 1  
 219 <210> SEQ ID NO: 14  
 220 <211> LENGTH: 9  
 221 <212> TYPE: PRT  
 222 <213> ORGANISM: Artificial Sequence  
 224 <220> FEATURE:  
 225 <223> OTHER INFORMATION: Non-specific peptide  
 227 <400> SEQUENCE: 14  
 228 Met Lys Ser Asp Phe Tyr Phe Gln Lys  
 229 1 5  
 232 <210> SEQ ID NO: 15  
 233 <211> LENGTH: 4  
 234 <212> TYPE: PRT  
 235 <213> ORGANISM: Mus musculus  
 237 <400> SEQUENCE: 15  
 238 Ala Val Pro Tyr  
 239 1  
 242 <210> SEQ ID NO: 16  
 243 <211> LENGTH: 1480  
 244 <212> TYPE: DNA  
 245 <213> ORGANISM: Homo sapiens  
 247 <400> SEQUENCE: 16  
 248 gccatggacg aagcggatcg gcggetcctg cggcgggtgcc ggctgcggct ggtggaagag 60  
 249 ctgcagggtg accagctctg ggacgccctg ctgagccgag agctgttcag gccccatattg 120  
 250 atcgaggaca tccagcgggc aggcctctga tctcggcggg atcaggccag gcagctgac 180  
 251 atagatcttg agactcgagg gagtcaggct cttcctttgt tcatctcctg cttagaggac 240  
 252 acaggccagg acatgctggc ttogtttctg cgaactaaca ggcaagcagc aaagttgtcg 300  
 253 aagccaaccc tagaaaacct taccocagtg gtgctcagac cagagattcg caaaccagag 360

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DATE: 02/27/2002

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TIME: 10:16:19

Input Set : A:\475.app

Output Set: N:\CRF3\02272002\J068569.raw

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254 gttctcagac cggaaacacc cagaccagtg gacattgggt ctggaggatt tggatgatgc 420
255 ggtgctcttg agagtttgag gggaaatgca gatttggctt acatcctgag catggagccc 480
256 tgtggccact gcctcattat caacaatgtg aacttctgcc gtgagtcagg gctccgcacc 540
257 cgcactggct ccaacatcga ctgtgagaag ttgcggcgct gcttctctct gctgcatttc 600
258 atggtggagg tgaaggcgca cctgactgcc aagaaaatgg tgctggcttt gctggagctg 660
259 gcgcagcagg accacgggtg tctggactgc tgcgtgggtg tcattctctc tcacggctgt 720
260 caggccagcc acctgcagtt cccaggggct gtctacggca cagatggatg ccctgtgtcg 780
261 gtcgagaaga ttgtgaacat cttcaatggg accagctgcc ccagcctggg aggggaagccc 840
262 aagctctttt tcatccaggg ctgtgggtgg gagcagaaag accatgggtt tgaggtggcc 900
263 tccacttccc ctgaagacga gtcccctggc agtaacccc agccagatgc caccctgttc 960
264 caggaaggtt tgaggacctt cgaccagctg gacgccatat ctagtctgcc cacaccaggt 1020
265 gacatctttg tgtctactc tactttccca ggttttgggt cctggaggga cccaagagt 1080
266 ggctcctggt acgttgagac cctggacgac atctttgagc agtgggctca ctctgaagac 1140
267 ctgcagtcct tcctgcttag ggtcgcta at gctgtttcgg tgaaagggat ttataaacag 1200
268 atgectggtt gctttaattt cctccggaaa aaacttttct ttaaaacatc ataaggccag 1260
269 ggcccctcac cctgccttat cttgcacccc aaagctttcc tgcccaggc ctgaaagagg 1320
270 ctgaggcctg gactttcctg caactcaagg actttgcagc cggcacaggg tctgctcttt 1380
271 ctctgccagt gacagacagg ctcttagcag cttccagatt gacgacaagt gctgaacagt 1440
272 ggaggaagag ggacagatga atgccgtgga ttgcacgtgg 1480

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274 &lt;210&gt; SEQ ID NO: 17

275 &lt;211&gt; LENGTH: 5

276 &lt;212&gt; TYPE: PRT

277 &lt;213&gt; ORGANISM: Artificial Sequence

279 &lt;220&gt; FEATURE:


280 &lt;223&gt; OTHER INFORMATION: Consensus cysteine protease active site.

282 &lt;221&gt; NAME/KEY: VARIANT

283 &lt;222&gt; LOCATION: (4)...(4)

284 &lt;223&gt; OTHER INFORMATION: Xaa = Arg, Gln or Gly

286 &lt;400&gt; SEQUENCE: 17


 287 Gln Ala Cys Xaa Gly

288 1 5

291 &lt;210&gt; SEQ ID NO: 18

292 &lt;211&gt; LENGTH: 32

293 &lt;212&gt; TYPE: PRT

294 &lt;213&gt; ORGANISM: Homo sapiens

296 &lt;400&gt; SEQUENCE: 18

297 Pro Glu Asp Glu Ser Pro Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro

298 1 5 10 15

299 Phe Gln Glu Gly Leu Arg Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser

300 20 25 30

303 &lt;210&gt; SEQ ID NO: 19

304 &lt;211&gt; LENGTH: 5

305 &lt;212&gt; TYPE: PRT

306 &lt;213&gt; ORGANISM: Homo sapiens

308 &lt;400&gt; SEQUENCE: 19

309 Ala Thr Pro Phe Gln

310 1 5

313 &lt;210&gt; SEQ ID NO: 20

314 &lt;211&gt; LENGTH: 5

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/068,569

DATE: 02/27/2002

TIME: 10:16:20

Input Set : A:\475.app

Output Set: N:\CRF3\02272002\J068569.raw

L:16 M:270 C: Current Application Number differs, Wrong Format

L:215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13

L:287 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17